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May 21, 1992

Ms. Donna R. Searcy  
Secretary  
Federal Communications Commission  
Washington, D.C. 20554

92-59 /

Dear Ms. Searcy

On behalf of Entertainment Communications, Inc., there are herewith submitted an original and four copies of its "Comments" with respect to the Notice of Proposed Rule Making in MM Docket No. 92-59.

If any additional information is desired in connection with this filing, please contact the undersigned counsel.

Very truly yours

  
Brian M. Madden

Attachments

cc: Andrew J. Rhodes  
Nancy J. Walls  
George Borsari, Esq.  
WRCC Partners

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MAY 21 1992

Federal Communications Commission  
Office of the Secretary

BEFORE THE

# Federal Communications Commission

In the Matter of

Amendment of Section 73.202(b),  
Table of Allotments,  
FM Broadcast Stations  
(Bradenton, Florida)

)  
)  
) MM Docket No. 92-59  
) RM-7923  
)  
)

To: Chief, Allocations Branch  
Mass Media Bureau

## COMMENTS OF ENTERTAINMENT COMMUNICATIONS, INC.

Entertainment Communications, Inc. ("Entercom"), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, submits these comments opposing the above-captioned Petition for Rule Making ("Petition") filed by Sunshine State Broadcasting Company, Inc. ("Sunshine"), licensee of Station WDUV(FM), Bradenton, Florida, to substitute Channel 278C for Channel 277C at Bradenton, and modify the license of Station WDUV(FM) to specify operation on the new channel.

In its Petition, Sunshine contends that Station WDUV(FM) currently operates with 100 kW, but is precluded from achieving full Class C status because it cannot achieve the minimum height above average terrain required of a Class C station due to FAA restrictions and Commission spacing limitations. Petition at 1-2. Sunshine asserts that the proposed substitution will allow it to relocate in an area which would permit construction of a tower of

sufficient height to meet the minimum Class C requirements. Petition at 3. Sunshine also asserts that the proposed substitution can be accomplished in "full compliance with the Commission's Rules and Regulations," and "that its proposed tower would not be a hazard to air navigation." Petition at 3-4.

Entercom, the licensee of Station WYUU(FM), Safety Harbor, Florida, opposes Sunshine's Petition to substitute Channel 278C for Channel 277C because the substitution fails to satisfy the Commission's technical rules and the Federal Aviation Administration's ("FAA's") limitations on tall towers within the permissible site zone for Channel 278C.

In fact, Sunshine itself concedes that "airspace considerations in the Sarasota and Bradenton areas are matters of considerable concern." Petition at 3. Entercom agrees. At Entercom's request, Daniel G. Tenold, an Airspace and Flight Specialist with Aviation Systems Associates, Inc., conducted an aeronautical study of the specific site proposed by Sunshine and of the entire area for which a tower could be located for operation on Channel 278C without violating pertinent spacing considerations. Based on his analysis, Mr. Tenold concludes that the FAA would not approve Sunshine's proposed tower, or any other tower of sufficient height to meet minimum Class C requirements, anywhere within the permissible site zone for Channel 278C. See attached Aeronautical Study Regarding Feasibility of Obtaining FAA No Hazard

Determination For Channel 278C at Bradenton, Florida ("Aeronautical Study"), at 1-3.

Sunshine states that its proposed reference point is near a location where the FAA has permitted the construction of towers of sufficient height to allow full Class C operation. Petition at 3. However, the fact that other tall towers are at a location "nearby" is irrelevant to FAA consideration of Sunshine's specific transmitter site. In fact, as will be discussed below, these "nearby" towers are more than eight miles from the coordinates designated by Sunshine and are outside of the permissible site zone. Even if Sunshine intends eventually to specify its new tower at a location different from that designated, but one which has already received FAA approval, it cannot do so at the allotment stage and still comply with the Commission's spacing rules.

As Entercom will demonstrate herein, there is no available site -- theoretical or otherwise -- which complies with the FAA's air hazard regulations and the Commission's spacing requirements. Thus, Sunshine's Petition to amend the FM Table of Allotments must be denied.

**NO PROPERLY-SPACED SITE EXISTS WITHIN THE PERMISSIBLE SITE ZONE WHICH COMPLIES WITH THE FAA'S AIR HAZARD REGULATIONS**

Entercom disputes Sunshine's assertion of the existence of a site within the permissible site zone for Channel 278C which both meets the Commission's minimum spacing requirements and fully complies with FAA air hazard regulations. Given the reference coordinates specified for the new allotment, and the spacing

considerations for a Channel 278C operation, a broadcast tower located in the permissible site zone must be constructed at a height of at least 1046 feet above mean sea level ("AMSL") to meet minimum Class C requirements. See Engineering Statement of Bernard R. Segal in Support of Comments in the Matter of MM Docket No. 92-59 ("Engineering Statement"), at 3-4. This figure represents the practical minimum height of a tower at the designated location in order to attain the necessary antenna radiation center height of 984 feet (300 meters) height above average terrain ("HAAT"). Engineering Statement at 3. Based upon this information, Entercom retained Mr. Tenold, who investigated FAA considerations for a tower of this height at the location designated by Sunshine and throughout the entire permissible site zone. As evidenced by the attached Aeronautical Study, it is Mr. Tenold's opinion that neither at Sunshine's proposed site nor at any other site within the permissible site zone of Channel 278C would Sunshine receive approval from the FAA to build a tower of a sufficient height to meet the minimum Class C requirement of 300 meters HAAT. Aeronautical Study at 1-3.<sup>1/</sup>

Specifically, the proposed tower at the designated coordinates would exceed FAA obstruction standards by 500 feet, and result in a height that increases the minimum instrument flight altitude

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<sup>1/</sup> Mr. Tenold considered a tower constructed at 1049 feet AMSL, as the FAA utilizes a rounding scheme which in this context would treat in the same fashion any tower between 951-1049 feet (including Mr. Segal's calculated height of 1046 feet) for the purposes of these aeronautical and navigational requirements.

within the terminal area by 400 feet. Aeronautical Study at 1-2. Further, the tower site proposed is within 6.9 kilometers of the nearest runway at the Peter O'Knight Airport, and is within the four statute mile-wide airspace protection areas of several recognized routes used extensively for visual flight through the local area. A tower at a height of 1049 feet AMSL would have adverse effects both upon the instrument flight rule and visual flight rule operations of airplanes, and upon safe and efficient air traffic control in the greater Tampa area. Aeronautical Study at 2. In addition, the radar vectoring altitude throughout the site zone is currently 1600 feet AMSL; the tower proposed by Sunshine would require an increase of the radar vectoring altitude to 2000 feet AMSL, which Mr. Tenold states should not be approved by the FAA. Aeronautical Study at 2.

Mr. Tenold was asked to determine whether the FAA would approve a tower of the height needed by Sunshine's proposal at any location within the fully-spaced zone for Channel 278C. He concluded that a proposal to erect such a tower anywhere within the permissible site zone would be considered a hazard to air navigation. Aeronautical Study at 3. Further, it is Mr. Tenold's experience that the FAA can not, and would not, issue an approval for this tower because of the close proximity of several airports to the site zone. Aeronautical Study at 3.

Based upon the foregoing, it is readily apparent that FAA approval of a tower of sufficient height to permit Class C

operation is not feasible at the specified location or at any site within the permissible zone for Channel 278C. Engineering Statement at 1-5.

In rule making proceedings to allot FM channels, the Commission generally does not require detailed showings regarding the availability or suitability of a particular site beyond the requirement that an adequate signal be placed over the community of license and that a site which conforms to the spacing rules is identifiable. FM Table of Allotments (Key West, Florida), 3 FCC Rcd. 6423 (1988); FM Table of Allotments, (Crestview and Westbay, Florida), DA 92-561 (released May 15, 1992). However, in cases where a "sufficiently compelling showing" is made that no site exists which complies with the Commission's fundamental technical rules, the Commission will refuse to allot the requested channel. Id.; FM Table of Allotments, (West Palm Beach Florida), 6 FCC Rcd. 6975, 6976 (1991); FM Table of Allotments (Melbourne, Florida), 5 FCC Rcd. 1031, 1032 (1990).

Specifically, the Commission has recently stated,

"As long as such a site [which can meet the city coverage and spacing rules] is shown to exist, we will typically presume at the allotment stage that it is theoretically available and will utilize it as a basis for making allotments. We will, however, take into account a showing by a party that, in reality, no theoretical site exists because of environmental, air hazard, or other similar considerations."

FM Table of Allotments (West Palm Beach, Florida), supra, at 6976; Accord, FM Table of Allotments (Crestview and Westbay, Florida), supra, at 1 (general presumption in rule making proceedings that

a site is technically feasible is rebuttable). The Commission's concern for the integrity of the allocation process is so great that even once an allotment is made, that allotment can later be deleted if the Commission finds there was no reasonable basis to conclude, at the time of the assignment, that a conforming transmitter site was available. Amendment of FM Table of Allotments (Pinckneyville, Illinois), 41 R.R.2d 69, 72 (1977).

As evidenced by the Aeronautical Study and Engineering Statement, Entercom has established that no site within the permissible site zone of Channel 278C exists at which Sunshine would receive approval from the FAA to build a broadcast tower of a sufficient height to meet minimum Class C requirements. Based upon this conclusion, and Commission precedent, Entercom urges the Commission to deny Sunshine's Petition.

**THE LOCATION OF THE WDUV ANTENNA AT OR NEAR  
THE CLOSEST SITE PREVIOUSLY APPROVED BY THE  
FAA VIOLATES THE APPLICABLE SPACING RULES**

Sunshine represents that, with the exception of a short-spacing problem with the last licensed antenna site of Station WXKB(FM), Cape Coral, Florida,<sup>2/</sup> the rule making proposal for substitution of Channel 278C at Bradenton complies with all pertinent separation requirements. Petition at 3-4. In the foregoing material, Entercom established that this is not the case,

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<sup>2/</sup> Sunshine explains that Station WXKB was ordered in MM Docket No. 88-512 to move channels and operate on Channel 280C1, thus eliminating those short-spacing problems it had with Channel 278C. Petition at 3-4.



since there is no location within the fully-spaced site zone at which Sunshine will be able to build a tower adequate to meet the minimum requirements for a Class C station. This suggests that Sunshine actually intends to locate its tower outside of the permissible site zone, in which event the proposed channel substitution cannot be granted.

There is corroborating evidence of this intention contained within Sunshine's Petition. Mr. Segal notes that the engineering material in the Petition specifies an antenna radiation center height of 451.7 meters HAAT. Engineering Statement at 3; see also Petition, at Engineering Exhibit RM, Figure 1. This proposal would yield an overall structure height of 1549 feet AMSL, which is, only perhaps coincidentally, the height of at least one of the towers at an antenna farm approximately 8.5 miles east of the site now specified for use by Sunshine. For operation on Channel 278C, the antenna farm is short-spaced to Station WQOL(FM), Vero Beach, Florida, and to Station WRUF(FM), Gainesville, Florida. Engineering Statement at 3. While Sunshine could possibly overcome such short-spacing through reliance upon Section 73.215 of the Rules at the application stage, it cannot avoid this fatal separation deficiency at the allocation stage.

It is also notable that at the time the Aeronautical Study was completed, Sunshine apparently has not filed any request for FAA approval for a tower at the coordinates designated in the Petition. See Engineering Statement at 6. Sunshine's failure to

seek FAA clearance for its proposed location, given its acknowledgement of the severity of FAA concerns in this area, serves as a further indicant that Sunshine does not actually intend to construct a new tower within the fully-spaced site zone.

It is established Commission precedent that "[a]ll proposals for channel allotments must meet the minimum distance separations of Section 73.207 of the [Commission's] rules with respect to other existing and prospective stations." In the Matter of Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM station Assignments by Using Directional Antennas, MM Docket No. 87-121, 6 FCC Rcd 5356, 5358 (1991). The Commission has repeatedly stated that the underlying requirement for any channel allotment is that there be a reasonable expectation that a useable site is available which fully complies with the Commission's minimum separation requirements. See, e.g., FM Table of Allotments (Crestview and Westbay, Florida), supra, at 1; FM Table of Allotments (West Palm Beach, Florida), supra, at 6976 (allotment allowed only where site would meet both distance separation requirements and city grade coverage rule). In sum, the Commission "will not allot a channel where a properly spaced site is technically infeasible." San Clemente, California, 3 FCC Rcd. 6728 (1988), dismissed sub nom. Mount Wilson FM Broadcasters, Inc. v. FCC, 884 F.2d 1462 (D.C. Cir. 1989).

Entercom has conclusively shown that a tower of height proposed by Sunshine cannot be built anywhere within the entire

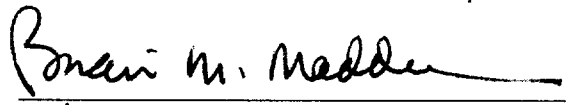
zone of fully-spaced locations available for the use by Channel 278C at Bradenton, Florida. Since Commission precedent dictates that all channel allotments must be made in full compliance with the Commission's minimum separation rules, Sunshine's proposed substitution of channels at Bradenton cannot be granted.

**CONCLUSION**

For the foregoing reasons, Entercom submits that Sunshine can advance no reasonable basis in which to assert there now exists an available site -- theoretical or otherwise -- which will be approved under FAA air hazard regulations and still meet the Commission's spacing requirements for operation of Station WDUV on Channel 278C. Entercom, therefore, respectfully urges that the Commission deny Sunshine's Petition for Rule Making.

Respectfully submitted

ENTERTAINMENT COMMUNICATIONS, INC.

By:   
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May 21, 1992

# AVIATION SYSTEMS ASSOCIATES, INC.

AVIATION CONSULTANTS



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## AERONAUTICAL STUDY REGARDING FEASIBILITY OF OBTAINING FAA NO HAZARD DETERMINATION FOR CHANNEL 278C AT BRADENTON, FL

My name is Daniel G. Tenold. I am an Airspace and Flight Procedures Specialist with Aviation Systems Associates, Inc., (ASA) at 23430 Hawthorne Blvd., Suite 200, Skypark Bldg. 3, Torrance, California, 90505. One of the principal activities of ASA is in the obstruction evaluation (OE) field conducting studies of proposed structures, such as broadcasting towers, cellular telephone towers, high-rise buildings, utility company towers and transmission lines, and other structures, and determining their compatibility with aircraft operating procedures, regulations, and air traffic control handling procedures. ASA handles approximately 500-600 of these type cases each year and is involved at any one time in 75 to 100 such projects.

My personal experience includes over 38 years in aviation as a military and commercial pilot and in FAA as an air traffic controller, flight procedures pilot, and as the Manager of various FAA flight procedures staffs. My experience is set forth more fully in the attached resume.

I have completed a ASA in-house aeronautical study to determine the feasibility of obtaining FAA approval for a 1,049' above mean sea level (AMSL) broadcasting antenna tower within the FCC permissible site zone for the proposed FM channel 278C allotment for Bradenton, Florida which was furnished to me by Jules Cohen & Associates, P.C.

- A. I first studied a specific site for the tower structure at 27°-49'-20" North Latitude, 82°-21'-50" West Longitude. At this specific site, a proposed tower of 1,049' AMSL would exceed the obstruction standards of Federal Aviation Regulation Part 77 as follows:

Section 77.23(a)(1) by 523' - a height exceeding 500' above ground level at the site of the proposed tower.

Section 77.23(a)(3) by 400' - a height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria.)



Offices in Washington, Los Angeles, Honolulu, Kitty Hawk

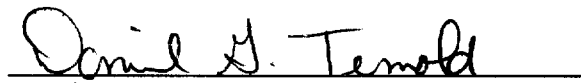
Section 77.23(a)(3) by 79' - a height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria.)

Further, the proposed tower at this site would have the following substantial adverse effects upon both instrument flight rule (IFR) and visual flight rule (VFR) operations of aircraft in the area, as well as upon the safe and efficient air traffic control handling of aircraft in the Greater Tampa area.

1. The proposed site is 6.9 NM from the nearest runway at the Peter O'Knight Airport. The proposed site at the height of 1049' AMSL would affect the FAA instrument departure procedure at this airport which is a very active VFR and IFR reliever airport in the Tampa area. The maximum height that would not affect these procedures at this site is 970' AMSL.
  2. The proposed site is within the four statute mile-wide airspace protection areas of several recognized VFR routes used extensively for visual flight through the area. These routes are centered upon Interstate 75 on the East, a contiguous railroad track and coastline highway, on the West and the Tampa Bay coastline. These impacts would limit the structure to 500 feet above the surface.
  3. The proposed tower would require an adjustment to the minimum radar vectoring altitude (MVA) by increasing a significant amount of airspace from 1600' AMSL to 2000' AMSL. Our firm has considerable obstruction evaluation experience in the Tampa area over the past years and has performed detailed studies of FAA air traffic control operations and radar vectoring for the military departures and arrivals at MacDill AFB and all the surrounding civil airports. This impact would be the most potent and substantial adverse impact. Our experience in plotting hours of the civil and military radar operations for the area over the years has shown us that the FAA cannot and would not amend or increase these radar altitudes due to the close proximity of all the airports within or close to the FCC permissible zone.
- B. I have also done a complete in-house aeronautical study of the remaining permissible site zone for Channel 278C. The results of this study also indicate that the required height of 1,049' AMSL would not be approved by FAA because of the following impacts to Part 77 obstruction standards and to the aircraft operational procedures:
1. Section 77.23(a)(1) by over 500'- a height exceeding 500' above the ground level at any site selected for the proposed tower.

2. Section 77.23(a)(3) by 400'- a height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).
3. Section 77.23(a)(3) by varying substantial heights, depending on exact location - a height that increases a minimum flight altitude within a terminal area (TERPS criteria).
4. Since the bulk of the FCC permissible zone is over water with small strips of land which support major highways, etc., the FAA criteria which denotes VFR routes would prevent any structure over 500' above ground in most of the zone.
5. In the areas to the south near Sarasota - Bradenton Airport, and at the north end of the permissible zone adjacent to the St. Petersburg Airport, the FAA uses large amounts of the airspace for instrument approaches which limits the heights of any structure to 649' AMSL, at the maximum.
6. The radar vectoring altitude throughout the FCC permissible zone is 1600' AMSL. The proposed structure would increase this altitude to 2000' AMSL. Our experience in plotting hours of the civil and military radar operations for the area over the years has shown us that the FAA cannot and would not amend or increase these radar altitudes due to the close proximity of all the airports within or close to the FCC permissible zone.

In view of the above, it is my professional opinion that a proposal to FAA for a 1,049' AMSL structure anywhere within the FCC permissible area would result in FAA issuing a Determination of Hazard.

  
Daniel G. Tenold  
Aeronautical Consultant

# **Daniel G. Tenold**

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Flight Inspection and Procedures Specialist

## **● General Qualifications**

Prior to joining ASA in 1984, Mr. Tenold had 30 years of experience with the Air Force, a civil air carrier and the FAA as an air traffic controller, pilot and procedures developer. He is a licensed commercial pilot with ATP privileges and several thousand hours of flight time. At ASA, Mr. Tenold specializes in obstruction evaluations and aircraft accident investigations.

## **● Experience**

While in the military service, Mr. Tenold was a controller in both towers and radar approach control facilities. He continued as a controller for the FAA in Air Route Traffic Control Centers (ARTCC) for several years after leaving the Air Force.

After a three year stint as Second Officer for a commercial Air Carrier, Mr. Tenold returned to the FAA and for 10 years was a pilot and crew member on flight inspection missions. This experience included performing periodic, special, post-accident and commissioning type flight checks of navigational aids.

He later became a Procedures Specialist developing instrument approach procedures, procedure reviews, obstruction evaluations, and site evaluations.

Mr. Tenold then managed the Procedures Section in an FAA Field Office until joining ASA.

During his Air Force and FAA career, Mr. Tenold received several awards for outstanding performance and special achievement.

## **● Education**

Mr. Tenold attended Mankato State College in Minnesota and graduated from USAF and FAA air traffic control schools. He also graduated from numerous FAA flight inspection, technical and managerial training programs and from the flight safety program at the University of Southern California.

**ENGINEERING STATEMENT  
IN SUPPORT OF COMMENTS  
IN THE MATTER OF MM DOCKET NO. 92-59  
AMENDMENT OF SECTION 73.202(b)  
TABLE OF ALLOTMENTS, FM BROADCAST STATIONS  
BRADENTON, FLORIDA**

The instant engineering statement has been prepared on behalf of Entertainment Communications, Inc. (Entercom) licensee of station WYUU(FM), Safety Harbor, Florida. This statement is in support of Comments in the Rule Making proceeding in MM Docket No. 92-59, RM-7923, which looks toward the allotment of channel 278C to Bradenton, Florida, for use by station WDUV(FM). This statement demonstrates that a viable site for Class C operation within the permissible site zone for channel 278 is not available. Hence, the proposed allotment does not fulfill FCC criteria and should not be made.

In the Petition for Rule Making (Petition) to allot channel 278C to Bradenton in substitution for channel 277C, Sunshine State Broadcasting Company, Inc., the Petitioner, requests a specific site for the allotment so as to "permit it [sic] obtain FAA approval for a tower which will exceed the minimum height necessary for a full Class C station".<sup>1</sup>

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<sup>1</sup> The specified geographic coordinates for channel 278C are 27° 49' 20" NL; 82° 21' 50" WL. However, as shown herein, FAA approval for a tower of sufficient height to permit Class C operation at the specified location is not possible. Moreover, no site is available within the channel 278C permissible site zone which will permit use of a tower of sufficient height to conform with Class C requirements.



JULES COHEN & ASSOCIATES, P.C.  
CONSULTING ELECTRONICS ENGINEERS  
WASHINGTON, D.C. 20036

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Engineering Statement  
Safety Harbor, Florida

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Attached herewith as Figure 1 is a portion of a Sectional Aeronautical Chart on which the permissible site zone for the channel 278C allotment to Bradenton has been plotted. While not specifically labeled, a small circle near the intersection of the 188-kilometer constraint from station WQOL, Vero Beach, Florida, and the 209-kilometer constraint from Station WRUF-FM, Gainesville, Florida, identifies the site represented by the reference coordinates specified for the allotment, i.e., 27° 49' 20" NL, 82° 21' 50" WL.

The map of Figure 1 was sent to Aviation Systems Associates, Inc. (ASA), recognized experts in obstruction evaluation studies, with a request that they evaluate if a Determination of No Hazard to Air Navigation could be obtained from the FAA for a structure having an overall elevation of 1049 feet above mean sea level at the specified reference site. If the result of that study turned out to be negative, then ASA was to evaluate if a Determination of No Hazard could be achieved for a structure having an overall height of 1049 feet above mean sea level for any location within the permissible channel 278C site zone. The ASA study is attached elsewhere as part of these Comments. The ASA study concludes that the maximum height that could be achieved at the specified site or at any site within the channel 278C permissible site zone is 649 feet AMSL. A structure having an overall height of 649 feet AMSL will not permit attainment of an antenna height above average terrain of 984 feet (300 meters) which is the minimum required for a Class C station.

The 1049-foot height above mean sea level elevation was determined to be the approximate minimum practical height that could be employed which would permit attainment of an antenna radiation center height above average terrain of 984 feet.<sup>2</sup> The 1049-foot elevation was based on the following information and assumptions for a practical operation from the specified reference site.

Determination of Operational Facilities  
for Class C Operation

Channel 278C reference site coordinates	27° 49' 20" N. Latitude 82° 21' 50" W. Longitude
3-16 km terrain average for standard eight 45° spaced radials (NGDC 30-second database)	26' AMSL
Site elevation	20' AMSL
Radiation center for 984' HAAT	1010' AMSL or 990' AGL

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<sup>2</sup> In this connection, it is interesting to note that as part of the Engineering Exhibit in support of the Petition, a channel study is included, "FM Channel Study No. 1" which shows calculated distances to contours for a facility at the proposed site based on an antenna radiation center height of 1482.1' (451.7 meters) above average terrain. The 1482.1' height above average terrain value suggests that an overall structure height of 1549' AMSL is contemplated. The 1549' AMSL height corresponds to the height of at least one of the towers at the so-called Riverview antenna farm which can be seen on the map of Figure 1 as being approximately 8.5 miles (14 kilometers) east of the site specified for use in the Rule Making. All the tall towers at Riverview are short spaced with respect to WQOL, Vero Beach, channel 278C, and some are short spaced also with respect to WRUF-FM, Gainesville, channel 279C1.

JULES COHEN & ASSOCIATES, P.C.  
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WASHINGTON, D.C. 20036

Engineering Statement  
Safety Harbor, Florida

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The combination of a 35- or 40-kilowatt transmitter, with 1050 feet of 4-inch coaxial air dielectric transmission line (Andrew, HJ11-50, or equivalent), and a seven-bay antenna (Dielectric, DCR-C7, or equivalent) is the minimum practical that will yield 100 kilowatts (H&V) effective radiated power as demonstrated below.<sup>3</sup> A Class C station must have an effective radiated power of 100 kW.

Transmitter output power	34.8 kW (requires a 35- or 40-kW transmitter)
Efficiency for 1050' of HJ11-50 transmission line at 103.5 MHz	75.7% (0.115 dB loss/100')
Input power rating for transmission line at 103.5 MHz	54 kW <sup>4</sup>
Antenna power gain (Dielectric, DCR-C7)	3.8 (H&V)
Antenna length (top mount)	66'
Antenna length (side mount)	58'
Lighting allowance	3'
Top guy wire clearance allowance for side mounting	6'
Overall structure height AMSL for top-mounted antenna	
Radiation center AMSL	1010'
+ additional antenna height	33'
+ lighting	3'
Total height	1046'

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<sup>3</sup> A six-bay antenna employing 5" diameter coaxial cable also would permit attainment of 100 kW ERP (H&V) with use of a 40-kW transmitter. However, the small reduction in overall structure height that would ensue (less than 10') does not alter the conclusion that a supporting structure of sufficient overall height to permit attainment of an antenna radiation center of at least 984' (300 meters) above average terrain, is not possible anywhere within the permissible site zone.

<sup>4</sup> The average power rating for 3" coaxial cable, the next smallest size transmission line, is 36 kW. With a 34.8-kW input power requirement, a 3" line has insufficient margin to permit safe operation. Hence, a 4" diameter line must be used.

JULES COHEN & ASSOCIATES, P.C.  
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WASHINGTON, D.C. 20036

Engineering Statement  
Safety Harbor, Florida

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Overall structure height AMSL for side-mounted antenna

Radiation center AMSL	1010'
Additional antenna height	27'
+ guy wire clearance allowance	6'
+ lighting	3'
Total height	1046'

The foregoing data indicate that a height of as little as approximately 1046 feet above mean sea level could be employed. However, insofar as any FAA consideration is concerned, an elevation of 1046 feet above mean sea level is essentially the same as an elevation of 1049 feet above mean sea level. The 49-foot suffix value is the FAA demarcation for rounding off to the closest 100 feet for certain clearance considerations.

Thus, had an eight-bay or larger antenna been employed, the overall structure height would have exceeded 1049 feet and so would have exacerbated FAA considerations. On the other hand, use of an antenna having a lower gain than that for a seven-bay configuration, even though it would have reduced the overall structure height, could not reduce it sufficiently to alter the conclusion with regard to obtaining FAA approval for a structure having an overall height of 1049 feet AMSL. The example provided is merely to illustrate that from an FAA consideration standpoint, 1049 feet above mean sea level elevation is approximately the lowest height that could be employed that would permit attainment of Class C operation. It is clear that with a maximum permitted height of 649 feet AMSL for any location within the permissible site zone, compliance with the FCC's minimum height above average terrain requirement of 984 feet for a Class C station is not possible.

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Safety Harbor, Florida

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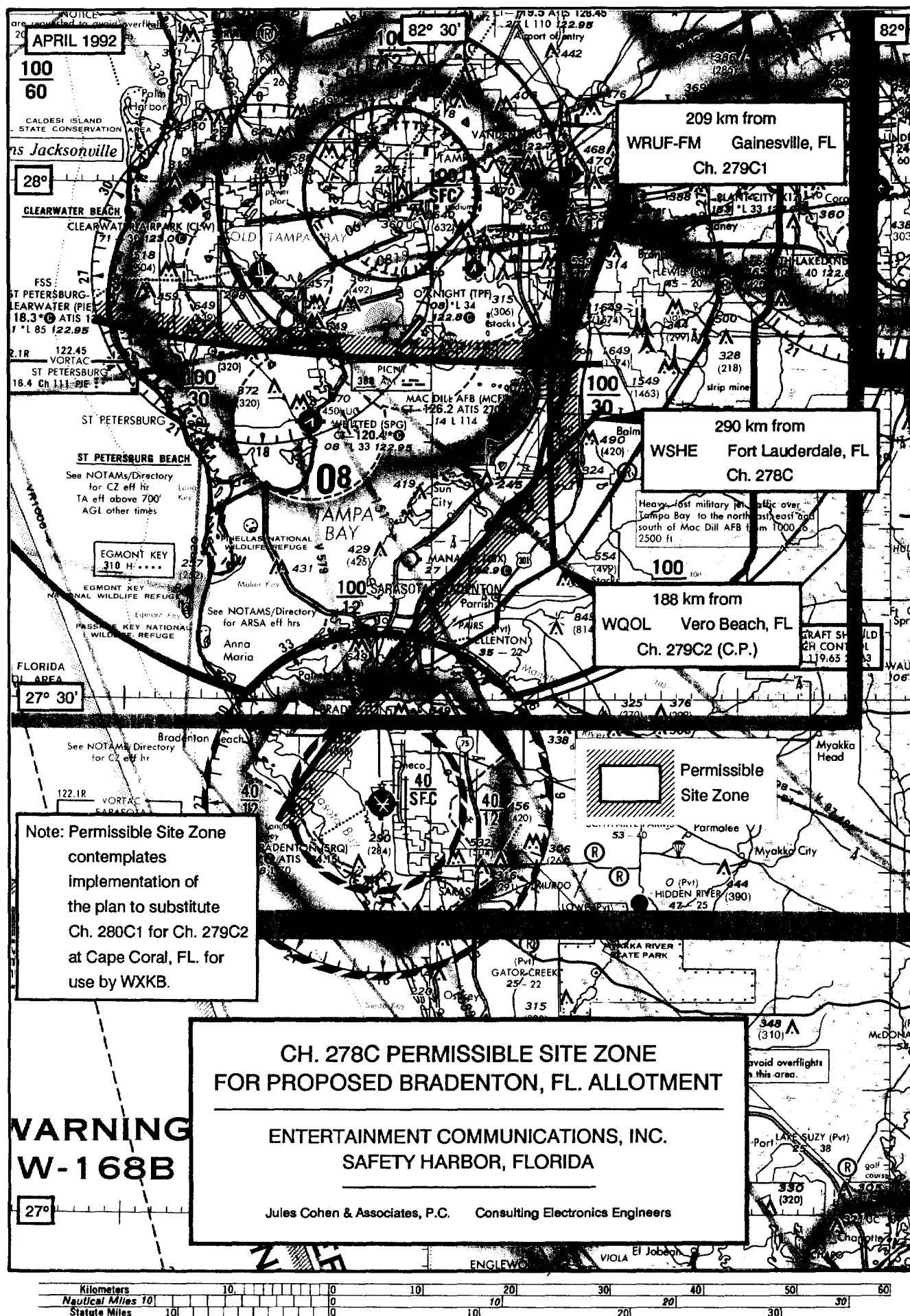
Any move of the reference site eastward a sufficient distance to avoid VFR and radar vectoring problems will result in a short spacing. Thus, all the Riverview towers are foreclosed from use because they are short-spaced for a channel 278C allotment. Moreover, reliance on the presence of the Riverview towers as a basis for claiming possible success in obtaining clearance for a tall tower at the channel 278C reference site or anywhere within the permissible site zone is not realistic, nor appropriate. A check with the FAA by ASA at the time they conducted their study, disclosed that no request had been filed for approval of a tower of any height at the reference coordinates specified by the channel 278C proponent.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on May 19, 1992.

A handwritten signature in black ink, appearing to read "Bernard R. Segal", with a stylized flourish at the end.

Bernard R. Segal, P.E.

### Figure 1



CERTIFICATE OF SERVICE

I, Gail Campbell, hereby certify that I have this 21st day of May, 1992, sent by U.S. Postal Service, or caused to be hand delivered, copies of the foregoing "COMMENTS OF ENTERTAINMENT COMMUNICATIONS, INC." to the following:

\*Andrew J. Rhodes, Esq.  
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Mass Media Bureau  
Federal Communications Commission  
2025 M Street, N.W.  
Room 8322  
Washington, D.C. 20554

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\_\_\_\_\_  
Gail Campbell

\* By Hand